



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,590	05/03/2002	Eyal Eliav	IR 688S-01	2704
30751	7590	06/01/2005	EXAMINER	
BANNER & WITCOFF, LTD., ATTORNEYS FOR RESERVE CLIENT NO. 3 1001 G STREET, N.W., 11TH FLOOR WASHINGTON, DC 20001-4597			CHIN, RANDALL E	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/063,590

Applicant(s)

ELIAV ET AL.

Examiner

Randall Chin

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 05052005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections***

1. Claims 11 and 19 are objected to because of the following informalities:

Claim 11, lines 3-4, the recitation "when said first section oscillates or rotates" makes the claim unclear since claim 1 never positively recites that the first section **oscillates or even rotates**.

Claim 19, line 5, "member" should read ~~section~~—for consistency.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-4, 11-15, 19 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 02/05725 (hereinafter WO '725).

The Examiner has relied on Fritsch et al. US 2003/0126698 for translation which is a continuation of PCT/EP01/07615 (which was published as the above WO '725 reference).

WO '725 discloses in the embodiment of Figs. 2 and 2A an elongated powered toothbrush with a head comprising a face on one side of the head, the face including a first bristle part or first section 11 and an additional bristle part or second section 16, the first section 11 being mounted for motion, drivingly connected to a drive assembly

Art Unit: 1744

(paragraphs [0029] and [0030]) and having a first set of bristles 12, 13 extending therefrom, the second section being displaced from said first section and hingedly connected (through spring web 20) to the head at a first end opposite (Fig. 2) the first section and otherwise free of a connection with a remainder of said head, said second section remaining static when said first section moves and no other external forces are applied to said second section (by virtue of selecting the web as an appropriate plastic and since specific guidance of the web 20 and/or additional bristle part 16 is not necessary in the case of the Fig. 2 embodiment; paragraphs [0042] and [0043]), said second section having a second set of bristles 17 extending therefrom, whereby, when said second set of tooth bristles are applied to the dentiture, said second section can yield away therefrom. Note, that although various embodiments of WO '725 teach that the additional bristle part 16 (or "second section") moves as a result of a resonance effect when the electrical toothbrush is turned on, the particular embodiment of Fig. 2, as explained above, teaches a second section can remain static when said first section moves and no other external forces are applied to said second section.

As for claims 2 and 3, said first set of bristles and second set of bristles are comprised of bristle tufts (Fig. 2).

As for claim 4, said first section contains a block (Fig. 2) defined merely by the head itself from which said first set of bristles extend.

As for claim 11, the second section is hingedly connected to a remainder of said head by a hinge (at end of spring web 20) deemed to be of sufficient thickness to

Art Unit: 1744

prevent any vibrations or spurious resonance from moving said second section when said first section oscillates or rotates.

As for claim 12, the movement of said first section is selected from the group consisting of rotation, rotational oscillations vibration, translation, lateral, and any combination thereof (paragraph [0030]).

As for claim 13, said first and second sets of bristles are of different heights (Fig. 2).

As for claim 14, the first set of bristles 13 has elements of different heights with respect to each other (Fig.2).

As for claim 15, said first and second sets of bristles are of different inclinations (Fig.2).

As for claim 17, said first section is located more distal from the brush handle than said second section (Fig. 3).

As for claim 19, WO '725 teaches in Fig. 1 a powered toothbrush comprising, a head including a base, a first movable section 11 including teeth cleaning elements 13 drivingly connected to a drive assembly and a second movable section 16 including teeth cleaning elements 17 adjacent said first movable section, said second movable section having a first end including a flexible support hinge defined by spring element 15 that connects said second movable member to said base and a second end free of a connection to said base (paragraph [0034]) .

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 8-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '725.

As for claim 5 reciting that the block is a disk of generally circular cross-section, it is noted that WO '725 appears to teach in the embodiments of Figs. 1-3 the first section block being generally rectangular (see plan view of Fig. 3A). However, WO '725 further teaches in Fig. 4 a variation which does teach a first section or block 11 being a disk of generally circular cross-section. Given such a teaching, it would have been obvious to one of ordinary skill to have modified the embodiment of Fig. 2 such that the first section is a disk of generally circular cross-section as taught by the other variation of Fig. 4 for mere design purposes and since WO '725 teaches the first section being either generally rectangular or a disk of generally circular cross-section.

As for claim 8, WO '725 already teaches the second section 16 being plastic (paragraph [0042]) and a specific limitation that the second section is made from polypropylene material is deemed obvious as such material is common and well known in the art and would be obvious for economical reasons.

With respect to claim 9, a broad recitation that the second section is made of elastomeric material is deemed unpatentable, particularly in view of the fact that the

Art Unit: 1744

second section is designed to be a spring web and hingedly connected to the head. An elastomeric material of sufficient hardness would thus be obvious to use to carry out this intended function.

For reasons similar to claims 8 and 9 above, given the fact that the web 20 is designed to be a **spring** web and designed to flex, one skilled in the art would recognize the need to select a material which can carry out this intended function optimally. Typically, in the toothbrush art, elastomers and/or plastics are used to enable part(s) of the toothbrush to flex. With respect to claim 10, one skilled the art recognizes the need to choose a proper flexing material or even a combination thereof (along with suitable hardness parameters) to optimally choose flexing characteristics that best suit the needs of a particular user and toothbrush.

As for claim 17, the Fig. 4 embodiment of WO '725 is deemed to teach all of the recited elements of claim 1. However, it should be noted that with slight modification of the Fig. 4 web 21 being made of an "appropriate plastic" (as taught for the Fig. 2 embodiment in paragraph [0042]), the Fig. 4 embodiment capable of functioning similar to the Fig. 2 embodiment. Accordingly, Fig. 4 teaches a handle and wherein the first section 11 is located more distal from the handle than the second section 16.

6. Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO WO '725 in view of Eliav et al. '283.

WO '725 teaches all of the recited subject matter with the exception of the second set of bristles having elements of different inclinations with each other. Eliav et

Art Unit: 1744

al. '283 teaches the concept of some all or of a set/group of bristles being at different inclinations with each other. It would have been obvious to one of ordinary skill in the art to have modified the second set of bristles of WO '725 such that they are at different inclinations with respect to each other as taught by Eliav et al. '283 for the purpose of providing enhanced cleaning and massaging of teeth.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO '725 in view of Blaustein 6,000,083 (hereinafter Blaustein '083).

As for claim 18, WO '725 teaches all of the recited subject matter with the exception of the second set of bristles located on the second section being softer than the first section bristles. Blaustein '083 discloses in Fig. 2, for example, one section of bristles 26 being softer than another section 24 of bristles. It would have been obvious to one of ordinary skill to have modified the WO '725 second set of bristles such that they are softer than the first set as taught by Blaustein '083 in order to vary and thus enhance the ability of bristles to abrade and clean tooth surfaces.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.



Art Unit: 1744

9. Claim 19 is rejected under 35 U.S.C. 102(a) as being anticipated by Calabrese 2001/0020314 (hereinafter Calabrese '314).

Calabrese '314 teaches in Fig. 3a a powered toothbrush comprising, a head including a base, a first movable section 9 (paragraph [0027]) including teeth cleaning elements drivingly connected to a drive assembly and a second movable section 8 (any one of the three shown) including teeth cleaning elements adjacent said first movable section, said second movable section having a first end including a flexible support hinge that connects said second movable member to said base and a second end free of a connection to said base.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1744

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


11. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, John Kim, can be reached at (571) 272-1142. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
R. Chin

  
Randall Chin  
Primary Examiner